

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number
WO 2005/093313 A1

(51) International Patent Classification⁷: **F17C 13/06**
(21) International Application Number:
PCT/KR2004/002319

(22) International Filing Date:
10 September 2004 (10.09.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2004-0016341 11 March 2004 (11.03.2004) KR

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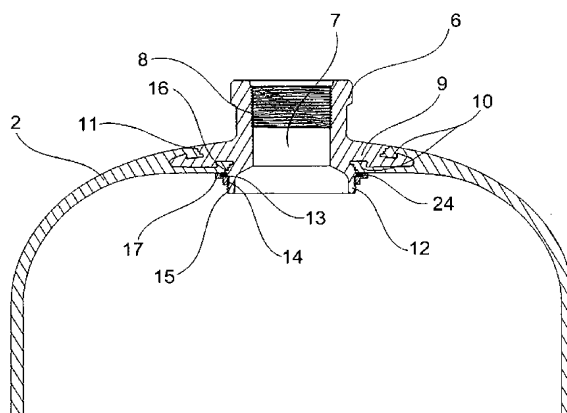
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: THE HIGH GAS-TIGHTEN METALLIC NOZZLE-BOSS FOR THE HIGH PRESSURE COMPOSITE VESSEL



(57) Abstract: The present invention relates to a metal nozzle boss provided with a sealing device, which has highly improved tightness and is combined with a plastic liner of a composite vessel used as a high-pressure vessel. The metal nozzle boss uses an elastic seal ring and a tightening piece in the plastic liner, so that the nozzle boss reliably seals the junction of the nozzle boss and the liner and prevents gas leakage from the vessel. The blade part of the nozzle boss has a dovetail-shaped locking groove, with locking ridges formed in the locking groove. Thus, when the plastic liner is produced by injecting molten resin into the locking groove, the plastic liner is securely combined with the metal nozzle boss. The composite vessel having the metal nozzle boss can be used as a fuel tank for natural gas vehicles or a hydrogen tank for fuel cell vehicles.

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